



The

GARzette

The Official Newsletter of the Gwinnett Amateur Radio Society
August 2019 <http://www.gars.org/> Volume 28, Issue 8



Next GARS Meeting: Hints and Kinks of Antenna Launching, Tuesday, August 13, at EAA Hangar



Next GARS Workshop: Mobile Radio Installations, Tuesday August 20, at EAA Hangar

Message from the President

Ralph and I just finished another successful HamCram with 11 new Technician licensees. One of the messages we tried to convey to the students was that getting your Technician License is similar to getting your Learner's Permit for driving. We've introduced these new Hams to Amateur Radio and there is so much to learn and explore, but how and where do you get started and where can you get help.

That's where Elmers come into the picture. When I was first licensed, I wasn't a part of a club and didn't have access to an Elmer. Without an Elmer, I had to work hard to find answers and I made plenty of mistakes along the way. Fortunately, I was taking an electronics class in High School that helped make some sense of this new technology and helped me get ready for moving up to General.

I had a visit in the week following the HamCram from one of the students from the class. He was full of questions and was like a sponge asking questions and soaking up new information. I urged him to get involved with GARS and ARES and come to meetings where others can help with his questions and eagerness to learn.

A couple of weeks ago, our own Don Stewart, KW4AL, approached the club about starting a new Elmer program. In the past, the club recruited a group of people to serve as Elmers and be available for new Hams and any member to contact for help and information. Don is proposing to take a different approach which has great potential. In short, Don is proposing linking up a new Ham with one of our member Elmers to be a dedicated resource to share information and help guide the new Ham entering Amateur Radio into areas of their interest. That sounds like the perfect resource for a



"...I hope that our members are willing to be an Elmer and for others to be willing to share their knowledge and guide new Hams."

new Ham to have a specific perform to Elmer them along.

Running this through in my mind, I considered that a particular Elmer may not be well versed in all of the many areas of Amateur Radio especially one that is of interest to a new Ham. When I think about the tremendous expertise and many different interests of our over

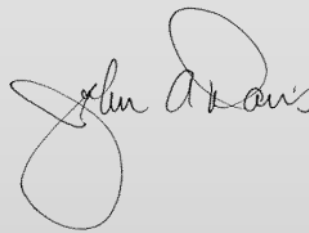
300 members, it seems that the Elmer can solicit the help of an expert in that particular area to share their knowledge.

Don's vision for a new Elmer program is exciting, but it will take a lot of help from our

members. We'll be hearing a lot more from Don on his vision and plans for the new Elmer program, but I hope that our members are willing to be an Elmer and for others to be willing to share their knowledge and guide new Hams.

I am confident that GARS members will accept the challenge and help the next group of new Hams.

73,



**WB4QDX, Club
President**

"It is not the class of license the Amateur holds, but the class of the Amateur that holds the license."

[Author Unknown]

GARS August Meeting and Workshop

Hints and Kinks of Antenna Launching

by Kevin Scott, K4GTR

Tuesday, August 13, 2019 7:00 pm

Mobile Radio Installations

by Alex Kowalchuk, W4KYW

Tuesday, August 20, 2019 7:00 pm

Sports Aviation Complex—Hangar 1

690 Airport Road

Lawrenceville, GA 30045

NOTE: Location Entrance to the Hangar has changed! See below link for more details!

[Updated entrance Directions to EAA Hangar](#)

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GARS Communications

2 Meter Repeaters

147.075(+) MHz Tone 82.5
147.255(+) MHz Tone 107.2

1.25 Meter Repeater

224.580(-) MHz Tone 100.0,
1.6 MHz Offset

70 Cm Repeaters

444.525(+) MHz Tone 82.5
442.100(+) MHz Tone 100
442.325(+) MHz Tone 100

6 Meter Repeater

53.110 (-1 MHz) No Tone
(Offline for Maintenance)

Other Resources:

APRS
144.390 -- 1200 Baud
W4GR

D-STAR

WD4STR
145.060 + (1.4 MHz)
440.550 + (5 MHz)

**Don't forget
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advertisers at the
back of the
GARzette.**

Snail Mail Address:
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P.O. Box 492531
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On the Cover: Land Rover picture from <https://qrznow.com/hf-mobile-antennas-ham-nation-2/>

The *GARzette* is the official monthly newsletter of the Gwinnett Amateur Radio Society, serving its members and other persons interested in the advancement of the Amateur Radio art.

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If possible, bring your articles to the monthly meeting in Microsoft Word or rich text (.rtf) or text or HTML format or by e-mail to editor@gars.org. Artwork can be accepted in most any graphics format and can be submitted via e-mail to the same address. Alternate means of submittal can be arranged when necessary.

In keeping with the Amateur Radio spirit, permission is hereby granted for the reproduction of The *GARzette* articles by other Amateur Radio club newsletters provided that proper credit is given to the individual author and *The GARzette*.

The GARzette is published each month with the assistance of Norm Schklar, WA4ZXV who prints copies for distribution at meetings, etc. and Dave Bruse, W4DTR, who distributes the news letter electronically.

Deadline for submissions is the 28th of each month for inclusion in the following month's issue.

For additional information view our Website at: <http://www.gars.org>

Newsletter Editor: editor@gars.org Bill Eggers—WB2RIS 470-238-9603



GARS Happenings

20 Years ago in the August 1999 GARzette:

- This month's "On The Air" by Karl Phillips, K4GZZ, features Larry Thill, W4LJT;
- Bill Ahls, KE4EIH, tells us all about GARS' involvement with the annual Dacula Memorial Day Parade;
- GARS members install a new air conditioner unit at our main Repeater site;
- Mike, K4HBI, puts out a call for action for us "Geezers and Newbies" to get involved in our hobby;
- Barry, N1TOQ, gives us important safety tips about using generators;
- GARS' 1999 Field Day results are published on the GARS website.

You can always browse the GARzette archive at <http://www.gars.org/newsletters>

73, *Bill*, WB2RIS, GARzette Editor



Ham Cram Results - Saturday, July 20 and 27, 2019

We had an excellent exam session at our Technician Ham Cram Class on Saturday, July 27, 2019. 11 out of 12 applicants passed!

Exam session results:
- 11 new Technician

Special thanks to the Volunteer Instructors who spent two full Saturdays teaching all the material:

- John, WB4QDX
- Ralph, KJ4CNC

Special thanks to the Volunteer Examiners who made this exam session possible:

- Pam, WB1AKQ
- Frank, KV4SP
- Don, KK4NJM (Co-CVE)
- John, WB4QDX
- Bob, K4CQO
- Bill, WB4WTN
- Richard, KM4SWL
- Russell, AB4QQ
- Ralph, KJ4CNC

Thanks & 73,
Dave Bruse, W4DTR (CVE), GARS VE Team Leader

McConnell Middle School Open House

I assisted Jean Delashmit KM4FVO at their Open House where we were exposing students and their parents to the McConnell Amateur Radio Club, KD4TGR, with which GARS has been involved. I set up the railroad track and telegraph diorama that we used for our STEM presentation at Mason Elementary earlier this year. It works like a magnet drawing in kids and parents alike. It is amazing to see Jean working with the kids. We signed up 45 6th, 7th and 8th grade students that wanted to look further into participating in MARC.

Although she has now retired as a teacher at McConnell, she is still very involved with the radio club. I think that she will be at our August GARS meeting next week.



73, *Paul* W4KLY



Huntsville Hamfest

The 2019 ARRL Alabama State Convention



Will Be Hosted By The World's
Friendliest Hamfest

 **THE HUNTSVILLE HAMFEST** 
Von Braun Center, South Hall
Huntsville, Alabama August 17th and 18th, 2019

New equipment dealers, manufacturers, exhibitors
and the Flea Market will be located in the South Hall.

Go to hamfest.org for more information

Mark Brown N4BCD Hamfest Chairman @ (256) 503-8887 Email: mark.N4BCD@yahoo.com
Art Davis N4UC Dealer Show @ (256) 783-5676 Email: adavis1972@gmail.com
Jim Spikes N4KH Flea Market @ (256) 679-8891 Email: JimN4KH@gmail.com

 ***Largest Forum Sked in the Southeast*** 
Outstanding Contester Forums and Hospitality Suite

Imagine it is 1960 and there is no internet. You've seen the new QST and there is a new piece of equipment you want. Where do you get it? There is also an article on building something yourself. All you need are a few components but where can you find them? There are a couple of catalogues with components and maybe there is an ACK radio in your town but there is no Radio Shack and no HRO. [See <https://www.acksupply.com> for more information on "ACK radio".—Ed.]

How about a hamfest? There is at least one every year near you and all you have to do is wait and plan and hope someone has what you need. Hamfests filled a real need. The bone yard was packed and just about anything in the way of used equipment and components were available. The major manufacturers had their equipment on display and someone there to explain things.

Fast forward to 2019 and the internet. There are color photos of every new piece of equipment on the market and dozens of retail outlets selling them including an HRO in our neighborhood. There is Fry's and Microcenter and several other retail outlets near you. You no longer have to wait. Have hamfests become obsolete?

Well, there is still the camaraderie associated with talking to other hams but we can get that at the monthly meeting or the Saturday breakfast. What really makes a hamfest worthwhile are the forums. You can learn something from experts, go on a virtual DXpedition, keep current with the newest in gear and maybe win the grand prize. The forums at the Huntsville Hamfest are numerous and have a reputation for quality of content. There are usually 25 - 30 forums on Saturday covering technical topics, new equipment, ham activities (such as contesting) as well as the latest from the ARRL. There is something for new hams as well as experienced operators.

This year the Huntsville Hamfest is on August 17th and 18th and while it is 3½ hours away it is well worth the drive. It's closer than Dayton or Orlando and you can go and return in a day if you share the driving. They have listed 27 forums this year on Saturday and 4 on Sunday. Google "Huntsville Hamfest" for a list of forums, activities, directions, parking information, etc. It's indoors (read air conditioned) and it is the proof that hamfests are not obsolete.

73, *Earl*, AF4FG

50th Anniversary of Apollo 11

2018 was a big year for NASA anniversaries; NASA was created in 1958, the first manned lunar mission was in 1968, and the first elements of the International Space Station (ISS) were launched in 1998. 11 NASA amateur radio stations throughout the United States, as well as the International Space Station (ISS), participated in the event, known as NASA on the Air (NOTA), and made contacts from December 11, 2017 through December 27, 2018. Last year I participated in the special event, and was able to make 14 contacts, and was listed as #41 out of 18619 participants. Good enough to be listed on the Top 50 leaderboard.

Fortunately, the NOTA event was again activated for 2019, to celebrate the 50th anniversary of the Apollo 11 Moon landing. About half of the original stations from last year's event were reactivated. A webpage (see <https://nota.ka0s.net/>) shows how many QSO's were recorded by each NASA station (activators), as well as a list of contacts made by hams (chasers), ultimately broken down by band and mode for each chaser. Once again I participated. This time I made 6 contacts, and was listed as #39 of 5690 participants. Again, good enough to be listed on the Top 50 leaderboard.

As before, I enjoyed making the contacts, mostly by waiting for the stations to be posted on spotting networks. Several of the chasers told stories of how they, or close friends or relatives, participated in some part of the Apollo project, or the earlier Mercury or Gemini projects. I even heard the Goddard NASA Station (WS3NAN) add "Quindar tones" to their transmissions (see https://en.wikipedia.org/wiki/Quindar_tones). After seeing stations spotted on [DXSummit](#), and working them, I found myself tuning up and down the bands, making additional contacts with other special Apollo 11 special event stations that I was not even aware of. Some were affiliated with a museum or a company that participated in some aspect of the project, others were simply sponsored by local radio clubs. (I later found this web page <http://www.arrl.org/news/special-event-stations-to-commemorate-50th-anniversary-of-the-apollo-moon-landing> that lists most of the additional stations I contacted):

- K9MOT - Motorola Amateur Radio Club (Schaumburg, IL), to commemorate Motorola's contribution to the Apollo program and lunar communication;
- K2M (*not the 13 Colonies K2M*), the Great South Bay Amateur Radio Club honoring the men and women of Grumman (Long Island, NY) who built the Lunar Excursion Module (LEM);
- W3A - National Electronics Museum club station (MD); The Apollo 11 television camera was designed and built by Westinghouse Electric in Baltimore;
- N5A - Razorback Contest Club (Springdale, AR);
- WR4MG (Museum of Aviation, Robins Air Force Base), Warner Robins, GA;
- N1A - the Milford Amateur Radio Club (OH) will operate N1A (Neil #1 Armstrong) in celebration of the 50th anniversary of the First Man on the Moon;
- N0M - South East Metro Amateur Radio Club, SEMARC (MN) celebrates 50th anniversary of the NASA 1969 moon landing;
- K1M - Stratford Amateur Radio Club (CT).



I have to say that scanning the bands and finding the other special event stations was *fun*, much more than just waiting for the right spots to answer. Since I chase DX, I use spotting networks all the time, more of a habit than anything else. I realize now that using spotting websites can take something away from an experience like this; I may have not known about the other stations unless I took the time to tune up and down the band, and LISTEN. I now look forward to the next event where I can enjoy participating without needing to use spotting networks.

"It's one small step for a ham, one giant leap for hamkind"

73, *Bill*, WB2RIS

Replacement Display for Kenwood TM-V7A

By Bob Hensey, K4VBM (Part 1 of 2)

This is about my own adventure creating a replacement LCD display for one of my Kenwood TM-V7A dual band mobile radios. I am not a hardware guy by training (software was my thing), but some of my hobbies have forced me to learn electronics on my own and this story has greatly increased my knowledge of electronics through somewhat painful mistakes and simple lack of knowledge. But I keep telling myself: "It's fun"! The actual time for this project from start to finish was many months, but a lot of that time was waiting for parts to arrive from overseas. I have tried to relate the actual events in correct time order as best I can remember in spite of my Very Bad Memory.

First some background: My first radios were second-hand which I bought as a new Technician class license holder from the son of a ham that had had a serious stroke and could no longer operate – a Kenwood TS-870 HF radio, and a Kenwood TM-V7A dual band mobile radio. The TM-V7A introduced me to repeaters, and the TS-870 introduced me to the exciting world of HF, and they both introduced me to antenna construction and antenna tuning.



Figure 1 - The Kenwood TM-V7A

I liked the TM-V7A so much, I later bought another used one on eBay at a good price that had a failing LCD display, but I had found an article on the internet where a foreign ham described his own journey in 2008-9 to create a replacement LCD display for his own TM-V7A, <http://pd2rld.nl/index.php/zelfbouw/display-tm-v7>, so I figured maybe I could do that same thing someday and minimally I would have a spare radio if the original died for some reason. Some years passed.

Fast forward to the present – I now have time to attempt the project. Here is another document I found on the internet with very helpful information about the project: http://pd2rld.nl/images/zelfbouw/display_tmv7/ed-engels.pdf I purchased the LCD display, a proto board, a number of components, a usbsap programmer, and then waited for everything to arrive. The cost was low and I was game for some fun.

Once everything arrived (the stuff from China took forever), I decided that my first objective would be to program the ATmega8 microcontroller with the pre-compiled hex code provided. This was harder than I ever could have believed. I chose to purchase a USB serial programmer on eBay instead of building the parallel programmer in the documentation. First problem, the ZIF socket board provided with the programmer did NOT accept the smaller ATmega8-16U DIP. So, I ended up buying another smaller version ZIF socket board that would work with my programmer and had to wait more weeks for that to show up (see picture below).

(Continued on page 8)

Replacement Display (Cont'd)

(Continued from page 7)

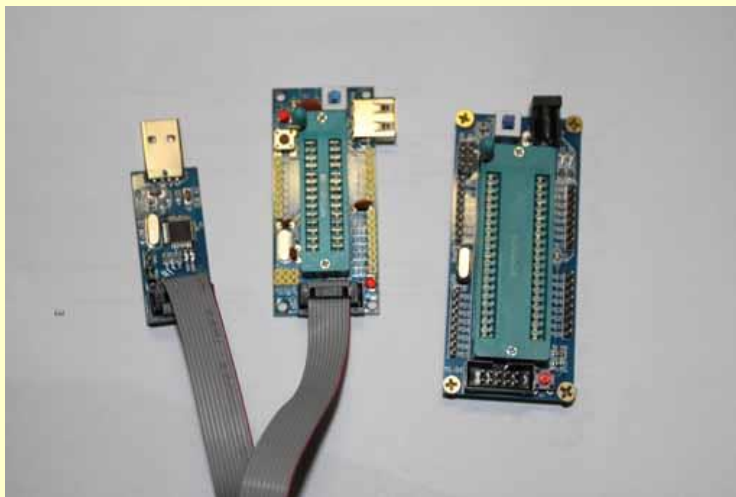


Figure 2 - My USBasp programmer with ZIF boards

Once it did, then I needed to choose programming software to use. WOW – so many choices. The Ponyprog software mentioned in the documentation didn't work with my new usbasp programmer – I eventually settled on AVRdude version 6.3, which is a command line program with no GUI. I tried a lot of software, and many programs didn't work with the usbasp programmer that I had purchased and many of the other free versions were too crippled or just were not easy to use.

Even getting AVRdude to work wasn't easy. I actually figured out how to program the chip after hunting for and finding and loading generic windows drivers for the usbasp programmer, and reading through the AVRdude documentation and looking at the examples. After much trial and error, the command turned out to be:

```
avrdude -c usbasp -p m8 -P usb -U flash:w:"C:\avrdude-6.3-mingw32\TMV7_V106.HEX":a
```

-p was the part and **'m8'** was for an ATmega8. **-P** says the port is via USB. **-c** is the type of programmer which in my case was a usbasp. All that just to put program code into a microcontroller's flash memory.

Next it was time to fire up the soldering iron, and plan out a layout for the proto board. I don't have a lot of experience doing that, so after some thought and staging various configurations what I ended up with works OK, but could be improved. Here is a picture of the proto board held in the neat board holder I saw others using during the NFARL Kit-Building Techfest event (I get so many good ideas from you other hams with more experience):

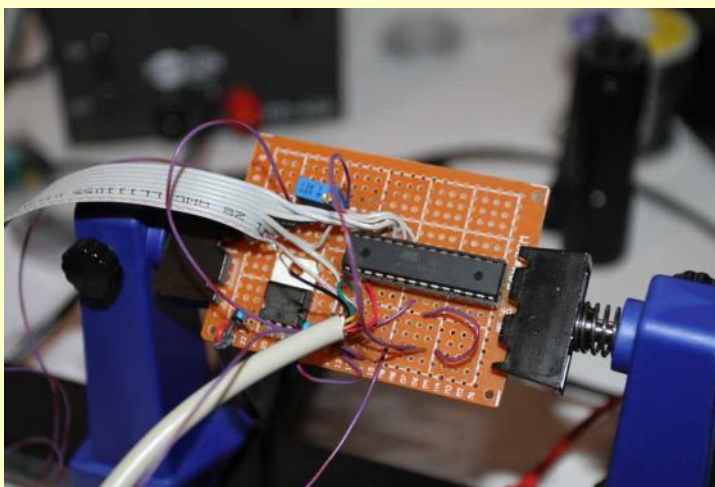


Figure 3 - The proto board

(Continued on page 9)

Replacement Display (Cont'd)

(Continued from page 8)

The ATmega8 chip is socketed so I can pull it and re-program it. The power (12V) comes in at the lower left (barely can be seen black cable with red and black wires) and hits the power regulator (bent over so the board will fit easier into the project box with the LCD) to become a usable 5V. The bottom row was designated voltage and the 3rd row from the bottom was designated ground. You just need 2 capacitors - on either side of the regulator (blue), and a resistor to the ATmega8 reset pin. The rest was mostly just connecting pins on the ATmega8 to pins on the LCD, and for that I used a piece of old IDE cable. Well, there was also the trimmer pot to control the brightness of the LCD. My first mess-up was not using local wires to connect all the grounds on the LCD which caused me to use some extra single wires in addition to the piece of IDE cable to bring all the grounds back to the proto board. Another change from the original instructions/design was that I decided to turn on the LCD back light – two more wires from the LCD to the proto board 5V and ground, not shown on the original schematic provided. Scary thing – I changed the original design. I guess hams are supposed to do that.

I still needed to make the cable to go to the data port on the radio (the beige cable in the picture above), but I wanted to see if the LCD would work, so it was time for the moment of truth – connect up to a 12V power supply and turn it on. After all that time, stripping wire ends, placing components, and soldering/de-soldering/soldering. Yes, de-solder braid is your friend. I hooked the power wire to the supply and turned on the switch. Well of course it didn't work, and that age old fear of “Did I let the smoke out of the chips and LCD?” immediately hit me like a brick. Got to find out what happened. Time for some trouble-shooting by looking at the provided schematic (below) and see what I did wrong.

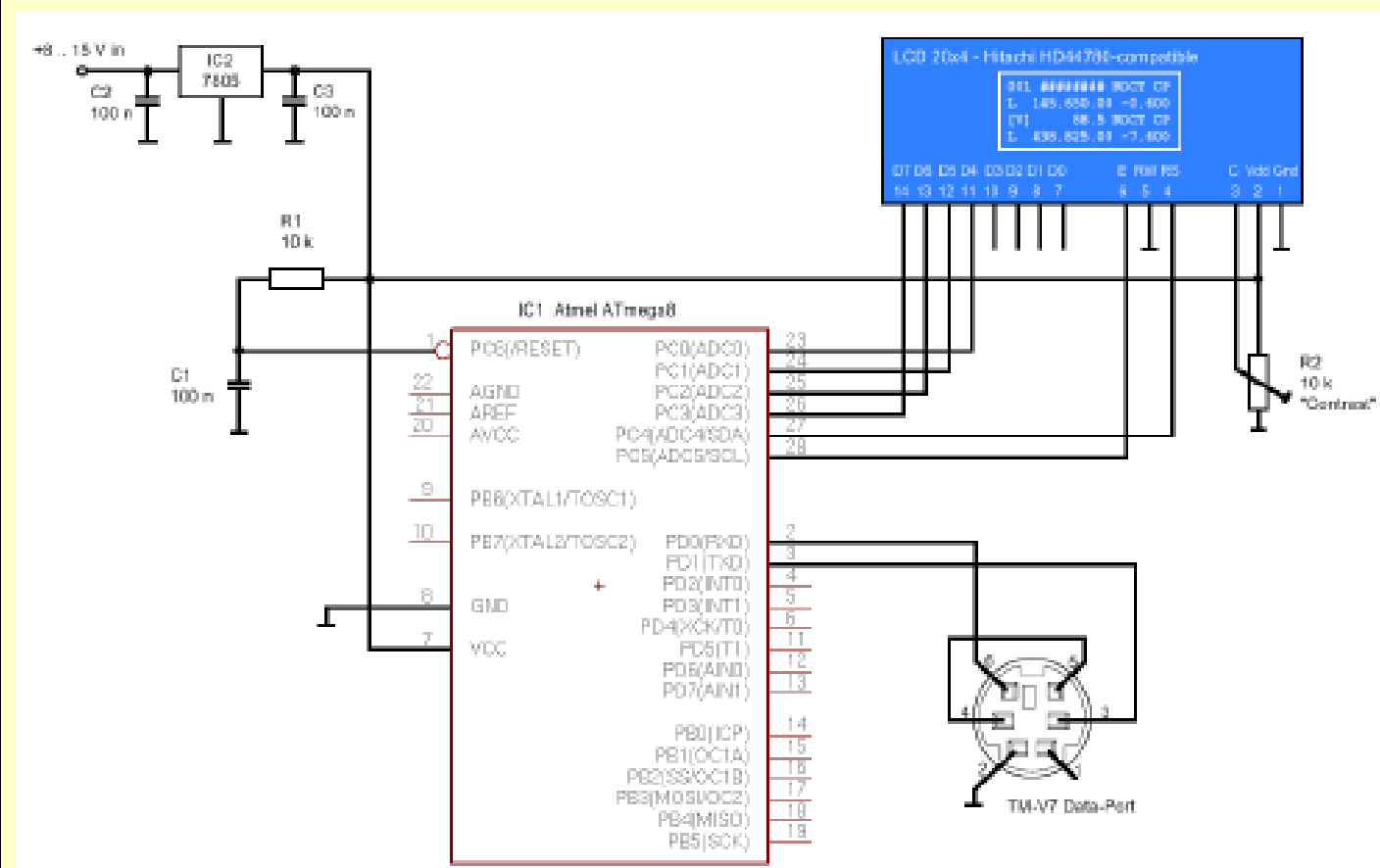


Figure 4 - The schematic

(Continued on page 10)

Replacement Display (Cont'd)

(Continued from page 9)

I checked the schematic and matched up to what I had created. Oops – I got 2 wires crossed from the LCD to the ATmega8 (one of the data lines and ground LOL). If you get in a hurry, you make mistakes. Note that you need to print out a real 28-pinout diagram for an ATmega8 so you know which pins are which, because the schematic above does not show them in the correct order. After the swap, I tested again. Well dang, no joy! OK troubleshoot some more - duh – I wired the brightness pot wrong. I mixed up the wiper with one of the ends.

To fix this, I destroyed the first pot trying to remove it to move it, so I used another fresh trim pot in a new spot on the proto board and removed the remains of the old one (*always buy spares when a rookie, so yes I bought 2 LCD's but they were only \$6 each, and buying 10 of something instead of 1 can give a nice per part discount, and I am a rookie, and maybe I am foolish enough to try more projects in the future*). Applied power, and something good finally! The LCD backlight lights up, but nothing else. Check again. OK, biggest DUH - I forgot to run a wire from pin 8 of the ATmega8 to ground. It just ain't gonna run no program like that. After hooking up yet another wire, I applied power and got this:

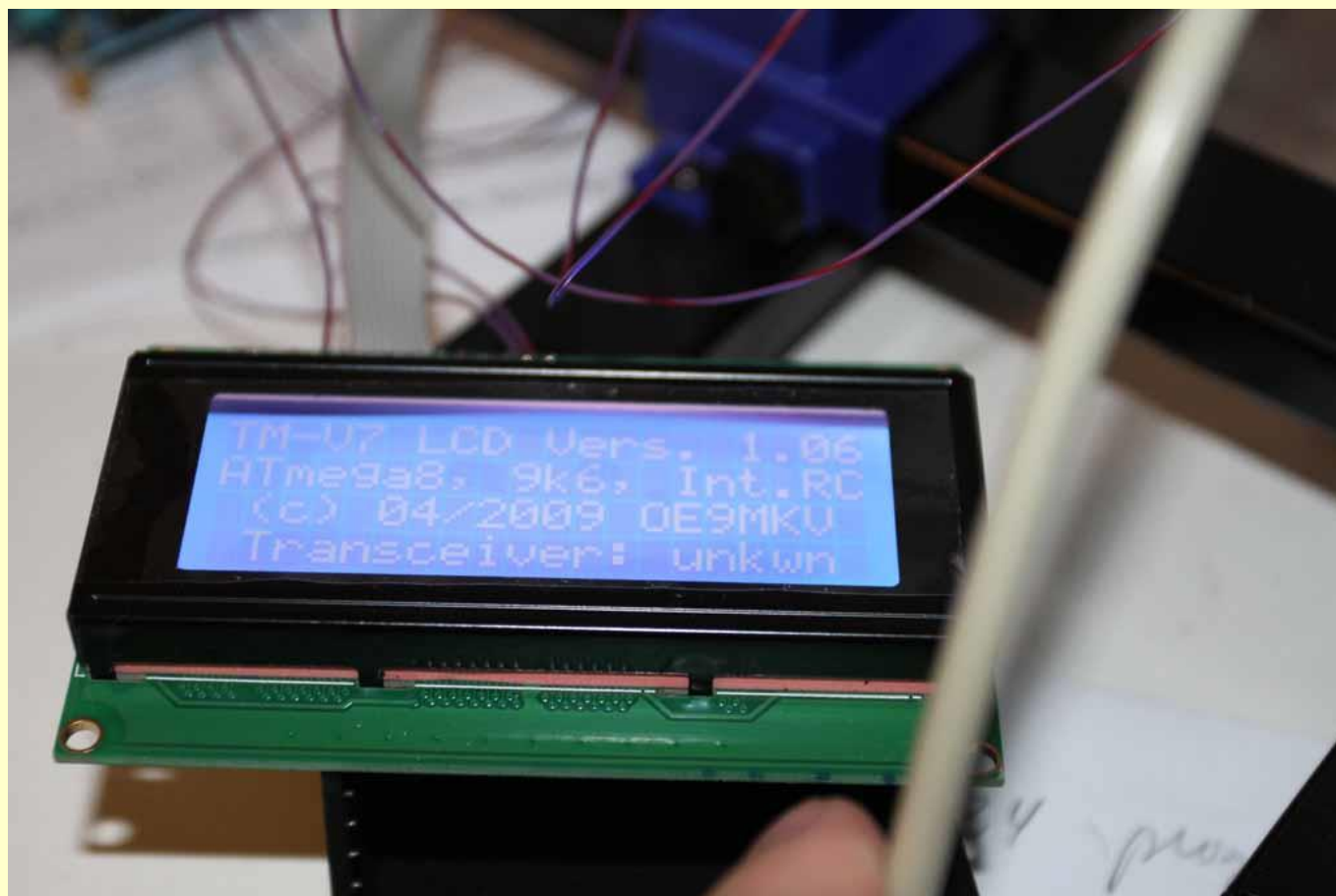


Figure 5 - ATmega8 talking to LCD

Yay! Smile. Celebrate a bit. Now some serious progress has been made. The ATmega8 is running the program and talking to the LCD! I didn't let the smoke out (at least not yet)!

But that is NOT the end of this story. If you are still reading and not died from laughter, there is more.

TO BE CONTINUED IN NEXT MONTH'S GARZETTE!

Beginner's Corner

Some of my Favorite YouTubers

Last time we took a look at some webcasters. Now let's take a look at some YouTubers who don't have regular webcasts or those who make videos in addition to their regular webcasts.

First on the list is Dave Casler, KE0OG. You can find him on YouTube by typing in either his name or call sign into the search bar on YouTube. Dave has a plethora of videos on numerous ham radio subjects. He has license videos for technician through extra class, as well. His YouTube site is worth checking out, whether you are unlicensed, newly licensed, or you have been an amateur radio operator for years.

Next is Signal Search. "Signal Search" is what you type into YouTube. He has a web site, <https://www.w5kv.com/>, as well. He is in the midst of putting up a tower, and he is sharing his experience with us. Johnny just bought a place in rural Texas and has his own outbuilding for a shack. It is interesting to see how he is progressing with both his antenna tower and his new shack.

"Ham Radio CQ" has almost 4800 subscribers as this was written. I really like his videos because he lets us know about his failures, as well as his successes. He likes to do a lot of portable work, and has inspired many people to try portable operations. He has done a VLOG (video log) on occasion, but we haven't seen any of them lately.

O8HSTN, Julian, is an American ex-pat who lives in Finland. He has over 14,000 subscribers, so he must be doing something right! This is the channel to watch for Grid Down and Emergency communications tips. One of his goals is to be as completely portable as possible. Julian goes on trips with an entire HF station man portable, along with my food, sleeping, shelter, power, and everything else required to operate that station in the field for days at a time. You will find his YouTube channel by typing in "survivaltech nord". His web site is oh8stn.org.

Typing in "Ham Radio Concepts" on YouTube will bring you to Eric, KJ4YZI. Eric loves building antennas and experimenting. His videos cover a wide range of amateur radio topics. You will never know what he will talk about next. Just be assured that whatever he talks about will be interesting.

"Ham Radio Crash Course" is run by Josh. His call sign is KI6NAZ and he goes by the nickname "Hoshnasi". Josh does a regular webcast Friday nights, and has lately been a part of "The Amateur Radio Roundtable" on W5KUB.com on Tuesday evenings. Again, Josh is into just about everything amateur radio. The one endearing thing that brought him to my attention was an attempt to use a string of Christmas lights as an HF antenna. The lights all blew out live on his program. Josh just reviewed the Icom IC-R30 wideband multi-mode receiver. He did an excellent review. Josh does a lot of very good reviews on many pieces of amateur related equipment.

Kevin Loughin, KB9RLW, is a YouTuber I have recently discovered. He goes by the name "The Old Tech Guy", but you will find him easier under his name. He is a ham radio RV-er. Kevin sold his home and travels around the country and does amateur radio stuff and makes videos of his activities. Currently he is in the desert outside of Kingman Arizona. He has been doing several antenna experiments. Kevin has done some experimentation with baluns. Check him out.



73 de *David Harden*, KJ4CMY

Gwinnett ARES Highlights

By Karen Whited, AB4NW

Meetings are held the 4th Tuesday at 7:30 pm at the EOC on Hi Hope Road. If you are interested in emergency communications, contact Hall Collier W4IGE at w4ige@arrl.net.

MEETING July 23: Bob Herrin KE4JLL

Bob, the Emergency Coordinator for Jackson/Banks County ARES, spoke about ham radio support of the Red Cross at UGA home football games. About 10-12 hams work a game and are assigned a Red Cross team to shadow. A dedicated EOC is on site where cameras monitor the stands and traffic is passed to a net control station. Bob is always seeking new hams to join the team. The most important things are to know your HT, and have a good attitude in interacting with fans and Red Cross volunteers. Occasionally help is needed beyond communicating. The time commitment is 3 hours before a game to around 30 minutes after. If interested, contact Bob at ke4jll@arrl.net.

Bob also described the multi-jurisdictional drill that occurred July 20 along the Broad River in the Athens area where 13 ARES hams supported the agencies' communications. The scenario was three people lost in the river. The counties of Madison, Oglethorpe, Elbert, and Wilkes joined several public safety units along with aircraft support. Larry Whited AB4NX and Jim Hawkins KF4RX participated from Gwinnett ARES.

DEPLOYMENT DAY – July 27

This exercise was a simulation of ARES providing communications from remote locations to an EOC. We set up our go-kits and antennas at Peachtree Ridge Park. Digital modes were tested by passing traffic back and forth. It was a great field test of our equipment with idea-sharing and mentoring from others. *Georgia Search and Rescue* was also on site observing our practices and picking up tips for their own operations. Participants were: Ed WA4YIH, David KA4KKF, Karen AB4NW, Larry AB4NX, Glen W3WWT, Charlie WS4TOT, Mark N7GRB, Bill KK4AUA, Hal W4IGE, Alan W4AJM, Lee KT4LS, Laura KK4FLY, Jim KF4RX, Eddie WD4JEM,



MEMBER PROFILE:

Ralph Pickwick KJ4CNC

Ralph, an Extra Class, lives in Lawrenceville and is originally from Bethlehem PA. He is married to Pat. He earned an Associate's degree in general engineering and a B.S. in business management from

York College of Pennsylvania. His previous employers include Western Electric, Bell Labs, AT&T, and Lucent Technologies in product management, product development, and sales. He was on the development team for fiber optic cable and is a "footnote" in fiber optic history.



Ralph was first licensed as a ham in 2008 via a GARS Ham Cram in Tucker. He's been a member of GARS and ARES for 11 years and is also a member of 10-10 and SEDXC. His radio and antenna equipment include a Kenwood TS-2000, Yaesu FT-857 and FT-897, Icom ID-51 PLUS, and 11 antennas in the attic: 7 dipoles, a vertical 2m/440, 2 Moxons, and an 80m Isotron.



As the GARS 2016 *Ham of the Year*, Ralph wears many hats in GARS, one of which is the Education chair. He enjoys teaching amateur radio and working with schools, being a dedicated member of the GARS Ham Cram team, and nurturing ham radio clubs in several schools

around the county. He also assures the GARS members are smartly outfitted as the GARS-Wear Coordinator. His other hobbies are woodworking, genealogy, model trains, and traveling.

DEPLOYMENT DAY *cont'd*

Geri K4GMF, Don KW4AL, Doug KB6RRX, Gregg W1ROO, and Jared N3ATL.



Net Managers Corner

Monday Night 2 Meter “Want, Swap, Sell, and Information Net”

GARS NEEDS MEMBERS TO SERVE AS NET CONTROL STATIONS!

GARS is a great Amateur Radio service club and we have the membership and awards to prove it. Our club is a very busy and active club and we use the Monday night net to get the information out to our members. Weekly participation is needed to make our net function well. There is only a small group of very dedicated people that make the net happen each week, and we need more members to volunteer to serve as Net Control Stations (NCS) on a rotating basis.

Out of almost 300 members, there are only SEVEN primary people who serve as NCS for the GARS net every Monday night. In no particular order, they are:

Don - KW4AL	Ray - N4GYN	Bill - KK4AUA
David - KA4KKF	Kevin - KK4WOG	Chuck - KK4TKJ
Russell - AB4QQ		

As GARS Net Manager (Chuck KK4TKJ), I really need 26 people to fill NCS positions. I do plan and post the schedule months in advance. Any conditions will be accommodated that you as a rotating NCS need to place on the scheduling of your duties. If your plans change, I can make adjustments for the schedule to work, and I will make those changes happen as soon as I am notified of a problem. As Net Manager, I also send out reminders each week to let the NCS scheduled know he or she is NCS for the next Monday night net. In short, serving as a rotating NCS is a small duty but a great contribution to the club.

The “Want, Swap, Sell Information Net” begins promptly at 19:30 every Monday night and runs about 45 minutes. As a scheduled NCS, you will request the assistance of a volunteer alternate NCS each time you have Net Control. Your simple duties will be to tune in to the GARS repeater, read the script, take a few notes and forward the information to me for record keeping.

Please lend a hand and contact me at KK4TKJ@arrl.net. Sign up to help support the effort that makes GARS the great club that it is.

73 and see you on the Nets!

Chuck McCord, KK4TKJ

GARS Net Manager

GARS Membership Page

New GARS Members in July

David Benoist (AG4ZR)
Richard Dervan (KN4VPJ)

New Members: 2

Total Members as of July 31, 2019
328

**Join GARS members for our
 weekly breakfast gathering at
 7:30 AM most Saturdays**

at

**Golden Corral
 2155 Riverside Parkway
 Lawrenceville, GA 30043**

([Directions](#))

**The following members are
 celebrating birthdays
 in August:**

HAPPY BIRTHDAY!!
From All of Us at GARS

Dave Adanich (K8WDJ)
Emory Albritton
Kyle Albritton (W4KDA)
Fadi A B Alhajahmed (KN4QDL)
Stephen Dearman (KI4IXR)
Richard Dervan (KN4VPJ)
George Guerin (KM4BOS)
David Harden (KJ4CMY)
Jared Hawkins (KM4SSI)
Rob Hoppe (KI4SBT)
Richard Jones (KM4JLB)
Gary Jones (W4HX)
Doug Kregel (KB6RRX)
Kim Kropat (K4UAL)
Ron Langston (WE50)
Samuel McClure (KM4AAO)
Jeffrey Samples (KN4VCR)
Lige Sims (AB4OK)
Robert Sloan (WA4DD)
Earl Whatley (AF4FG)
Laurence Whited (AB4NX)

GARS MEMBERSHIP

Your current GARS membership status is shown in the monthly newsletter e-mail towards the bottom of the message.

To become a GARS member, or to renew your GARS membership, please visit our website—<http://www.gars.org>

To make changes to your GARS membership (moved, new e-mail address, new phone number, etc.), please e-mail the Membership Committee - membership@gars.org

You can **renew or update** your Amateur Radio license information with the FCC at their website for free <http://wireless.fcc.gov/uls/index.htm?job=home>

To update your ARRL information, please visit their website - <http://www.arrl.org>

Membership Chair: Karen Albritton, KI4HPP
 Committee Members: Dave Bruse, W4DTR, Pam Meridy, WB1AKQ

EXTRA! EXTRA!

Repeater Status

6M	currently down
147.075	Operational in Snellville
147.255	Operational in Snellville
224.580	Operational in Grayson
442.100	Operational at Goshen Springs
442.325	Operational in Buford
444.525	Operational in Snellville

Link remote receivers being added



L&M Mobility

Robert (Mike) Smith
5191 La Paloma Dr.
Lilburn, GA 30047
Phone (404)-509-3104
Smithrm70@hotmail.com

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GARS on Social Media

GARS has moved to Groups.io!



Join GARS on Groups.io:
<http://gars.org/groups.io>



Visit GARS on Facebook:
<http://gars.org/facebook>








Follow GARS on Twitter:
<http://gars.org/twitter>















Join GARS on YouTube:
<http://gars.org/youtube>

G A R S Volunteers





OFFICERS

John Davis, President	WB4QDX	
Sandy Jackson, Vice President	KJ4DRO	
Joe Biddle, Secretary	AD4PZ	
Pam Meridy, Treasurer	WB1AKQ	
Randy Collins, Program Manager	N4COR	

COMMITTEE CHAIRS

Karen Albritton, Membership Chair and Public Information Officer	KI4HPP	
Dave Bruse, VE Team & Workshop Leader and Winter Field Day Chair	W4DTR	
David Adcock, Webmaster and Field Day Chair	KA4KKF	
Ralph Pickwick, Apparel Manager and Education Chair	KJ4CNC	
Glen Wendt, TechFest Chair	W3WWT	
Bill Eggers, GARzette Editor	WB2RIS	
Eddie Foust, Repeater Chair	WD4JEM	
Mike Weathers, WAS / DXCC QSL Card Checker and Historian	ND4V	
Chuck McCord, Net Manager	KK4TKJ	
Mike Swiderski, Technical / RFI Advisor	K4HBI	
GA QSO Party Chair	OPEN	
Kyle Albritton, Multimedia Chair	W4KDA	

DIRECTORS AND TRUSTEES

Kyle Albritton	W4KDA	
Mike Weathers	ND4V	
Rick Cobb	N4XYY	
Bill Cherepy, W4GR Trustee	WB4WTN	

GARS MEETING AND WORKSHOP MINUTES

Gwinnett Amateur Radio Society – GENERAL Meeting Minutes 7/9/2019

President John Davis (WB4QDX) Opened the meeting at 7:00pm and Closed the meeting at 8:45pm
EAA Facility, 690 Hanger Rd. Lawrenceville, GA.

Introductions and Visitors: Visitors were recognized and full Introductions of the [65] attendees followed.

Treasurer: Pam Meridy (WB1AKQ) Gave the Club financial report.

Membership Report: Karen Albritton (KI4HPP) reported that Membership is at [325].

Program Chair: Randy Collins (N4COR)
Announced Upcoming Programs:

- **August** – Drone Antenna Launching (Tentative)
- **September** – Morse Code by W4QO
- **October** - Show and Tell
- **November** - Tower Repair and Remote Ham System use.
- **December** – Holiday Party
- **January 2020** - Power Supplies

GARS Education – Ralph (KJ4CNC)

- Ham Cram Technician class is scheduled for **July 20th & 27th.**
- Thank you letters were passed around to the membership from the 5th grade kids at Mason Elementary expressing their appreciation to Ralph and GARS for the support they've been given.
- McConnell Middle School got selected to Phase II Club status. So, congratulations to KD4TGR (McConnell Amateur Radio Club) and Jean Delashmit (KM4FVO) whom is

instrumental in this venture.

- John reminds us that GARS is still accepting donations to the SK Memorial fund honoring Nick (AB4CQ). Any dollars donated will be matched up to \$500 by an anonymous contributor. Donate today.

GARS Workshop Program: David (W4DTR) outlined the next few workshop sessions coming up:

- **July** – What Is Club Log, and How Do I Get Started?
- **August** – Mobile Installations

Field Day 2019 – David (KA4KKF)

- 36 operators and visitors participated for a total of 105.
- Most CW contacts: **NN4K** (297)
- Most Digital FT8 contacts: **W3DJS** (153)
- Most Phone Contacts: **W4KYW** (226)
- Most Overall Contacts: **KM4PTW** (301)

Break:

Program - Last Man Standing TV Show
Operating by WB4QDX & KE4IKF

Submitted by: **Joe Biddle (AD4PZ), GARS Secretary**

Workshop Meeting Minutes 7/16/2019

Number in Attendance: 24

Workshop Topic:

What Is Club Log, and How Do I Get Started,
Presented by Mike Weathers, ND4V

Submitted by **Russell Prevost AB4QQ,**
GARS Workshop Committee Member
(Workshop Secretary)

ARRL CONTESTING INFO

From ARRL Contest Calendar
> For more information click the links <

August 2019

- 3-4 [222 MHz and Up Distance Contest](#)
- 17-18 [10 GHz & Up – Round 1](#)
- 18 [Rookie Roundup – RTTY](#)

September 2019

- 14-16 [September VHF](#)
- 21-22 [10 GHz & Up - Round 2](#)
- 21-22 [EME - 2.3 GHz & Up](#)

October 2019

- 19-20 [EME - 50 to 1296 MHz](#)
- 21-25 [School Club Roundup](#)

November 2019

- 2-4 [Nov. Sweepstakes - CW](#)
- 16-17 [EME - 50 to 1296 MHz](#)
- 16-18 [Nov. Sweepstakes - Phone](#)

December 2019

- 6-8 [160 Meter](#)
- 14-15 [10 Meter](#)
- 15 [Rookie Roundup–CW](#)

January 2020

- 1 [Straight Key Night](#)
- 4 [Kid's Day](#)
- 4-5 [RTTY Roundup](#)
- 18-20 [January VHF Sweepstakes](#)

February 2020

- 10-14 [School Club Roundup](#)
- 15-16 [International DX – CW](#)

March 2020

- 7-8 [International DX– Phone](#)

April 2020

- 19 [Rookie Roundup – Phone](#)

(no ARRL contests in May)

June 2020

- 13-15 [June VHF](#)
- 20 [Kid's Day](#)
- 27-28 [Field Day](#)

July 2020

- 11-12 [IARU HF World Championship](#)

For more information:

<http://www.arrl.org/contest-calendar>

HAMFEST CALENDAR

08/17/2019 | [Alabama State Convention, Huntsville Hamfest](#)

Location: Huntsville, AL
Type: ARRL Convention
Sponsor: Huntsville Hamfest
Website: <http://hamfest.org>

08/30/2019 | [Shelby Hamfest](#)

Location: Shelby, NC
Type: ARRL Hamfest
Sponsor: Shelby Amateur Radio Club
Website: <http://shelbyhamfest.org>

09/20/2019 | [W4DXCC, DX and Contest Convention](#)

Location: Pigeon Forge, TN
Type: ARRL Convention
Sponsor: The SouthEastern DX and Contesting Organization (SEDCO)
Website: <http://www.w4dxcc.com>

10/11/2019 | [ARRL Florida State Convention, 54th Annual Melbourne Hamfest](#)

Location: Melbourne, FL
Type: ARRL Convention
Sponsor: Platinum Coast Amateur Radio Society
Website: <http://pcars.org>

10/18/2019 | [Delta Division Convention \(Hamfest Chattanooga 2019\)](#)

Location: East Ridge, TN
Type: ARRL Convention
Sponsor: Chattanooga Amateur Radio Club
Website: <http://w4am.net/hamfest-chattanooga-2018/>

For more information: <http://www.arrl.org/hamfests-and-conventions-calendar>
When searching by division, remember some states adjacent to GA are in different divisions:
Southeastern: GA, AL, FL Delta: TN Roanoke: NC, SC

GARS Events Calendar for 2019	GARS Recurring Calendar																														
<table><tr><td>TechFest (www.techfest.info)</td><td>January 26</td></tr><tr><td>Winter Field Day</td><td>(same day as TechFest, not scheduled for 2019)</td></tr><tr><td>General HamCram</td><td>March 16 & 23</td></tr><tr><td>Dog Show Fundraiser</td><td>March 28 - 31</td></tr><tr><td>Georgia QSO Party</td><td>April 13 & 14</td></tr><tr><td>North metro area Fox Hunt</td><td>April</td></tr><tr><td>May Madness</td><td>May</td></tr><tr><td>Memorial Day Parade</td><td>May 27</td></tr><tr><td>ARC/KARC Hamfest</td><td>CANCELED for 2019</td></tr><tr><td>Field Day</td><td>June 22 & 23</td></tr><tr><td>Tech HamCram</td><td>July</td></tr><tr><td>JOTA</td><td>October</td></tr><tr><td>Maker Faire</td><td>October</td></tr><tr><td>Stone Mt. Hamfest</td><td>November 2 & 3</td></tr><tr><td>Holiday Party</td><td>December</td></tr></table>	TechFest (www.techfest.info)	January 26	Winter Field Day	(same day as TechFest, not scheduled for 2019)	General HamCram	March 16 & 23	Dog Show Fundraiser	March 28 - 31	Georgia QSO Party	April 13 & 14	North metro area Fox Hunt	April	May Madness	May	Memorial Day Parade	May 27	ARC/KARC Hamfest	CANCELED for 2019	Field Day	June 22 & 23	Tech HamCram	July	JOTA	October	Maker Faire	October	Stone Mt. Hamfest	November 2 & 3	Holiday Party	December	<ul style="list-style-type: none">♦ 2nd Tuesday of the month at 7 pm (except December): Monthly Club Meeting♦ 3rd Tuesday of the month at 7 pm (except December): Monthly Workshop♦ 2nd Sunday of the Month at 2 pm: GARS Ham Exam Session Fire Station #24 2735 Mall of Georgia Blvd Buford, GA 30519♦ Every Monday at 7:30 pm: GARS Want, Swap, Sell, and Information Net on the GARS 147.075 MHz repeater♦ Every Monday at 8:30 pm: ARES Training on the GARS 147.075 MHz repeater♦ Most Saturdays at 7:30 am: GARS Weekly Breakfast Golden Corral Restaurant 2155 Riverside Parkway, Lawrenceville, GA 30043
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Holiday Party	December																														
<div>September GARS Meeting: Morse Code By Jim Stafford, W4QO</div>																															

GARS CALENDAR OF EVENTS FOR AUGUST 2019

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
July 28	July 29 7:30 - 8:00 pm GARS 2m Net	July 30	July 31	1	2	3 7:30 - 9:30 am Breakfast at Golden Corral Riverside Drive
4	5 7:30 - 8:00 pm GARS 2m Net	6	7	8	9	10 7:30 - 9:30 am Breakfast at Golden Corral Riverside Drive
11 GARS VE Team Testing Session Starts at 2:00 pm	12 7:30 - 8:00 pm GARS 2m Net	13 5:00 - 6:30 pm Dinner 7:00 - 9:00 pm GARS Meeting	14	15	16	17 7:30 - 9:30 am Breakfast HUNTSVILLE HAMFEST Day 1
18 HUNTSVILLE HAMFEST Day 2	19 7:30 - 8:00 pm GARS 2m Net	20 5:00 - 6:30 pm Dinner 7:00 - 9:00 pm GARS Workshop	21	22	23	24 7:30 - 9:30 am Breakfast at Golden Corral Riverside Drive
25	26 7:30 - 8:00 pm GARS 2m Net	27	28	29	30	31 7:30 - 9:30 am Breakfast at Golden Corral Riverside Drive

Metro Testing Sessions

GARS publishes Metro Atlanta VE exam schedules as a service and is not responsible for errors or changes. Call and confirm schedules before going. All sessions are walk-in. Take copies of current license and certificate of completed elements with you to all sessions. Find additional sessions online at <http://www.arrl-ga.org>.

First Sunday, ODD Months

2 pm (Jan, Mar, May, Jul, Sep, & Nov)
VEC: WCARS
Braselton Public Utility Building
4986 Highway 53, Braselton, GA
Contact: Roger Gibson, WB4T
(770) 271-4210 or (770) 712-9560
w4rlg@bellsouth.net

First Sunday, EVEN Months

2 pm (Feb, Apr, Jun, Aug, Oct, Dec)
VEC: WCARS
Hall County EOC
470 Crescent Dr. Gainesville, Ga.
Contact: Perry Roper, KO4RD
(770) 536-3056

Second Saturday

10:00 AM
Alpharetta North Park, Adult Activities Center
13450 Cogburn Rd, Alpharetta, GA 30004
Contact: Ian Kahn, KM4IK
E-mail: km4ik.ian@gmail.com

Third Saturday, ODD Months

VEC: ARRL
9:30 am (Appointments required, no walk-ins)
Stone Mountain Masonic Lodge
840 VFW Drive
Stone Mountain, GA 30083
Contact: Frank Haynes, KV4SP
Email: fhaynes@vatmom.net
(678) 467-3712

Second Sunday

VEC: W5YI
2 pm
Fire Station #24
Mall of Georgia Boulevard
Buford, GA 30519
Contact: Dave Bruse, W4DTR
E-mail: exams@gars.org

First Sunday, EVEN Months

VEC: WCARS and W5YI
2 pm @ Barrow Co. Emerg. Serv. Bldg
66 McElroy Street
Winder, GA 30680
Contact: Mike Wolcott, W4WYI
(404) 281-6581
E-mail: W4WYI@ARRL.net

(cont. next column)

Ham Exam Results

July Results

On July 14 we tested four applicants.
Three achieved their Technician License and one upgraded to Extra.

Thanks to the following VE team members who administered the exam:

- Pam Meridy, WB1AKQ
- Russell Prevost, AB4QQ
- Bill Cherepy, WB4WTN
- Gregg Freeman, W1ROO
- Robert Hoffman, K4CQO
- Don Bagby, KK4NJM, Co-CVE
- Dave Bruse, W4DTR, CVE

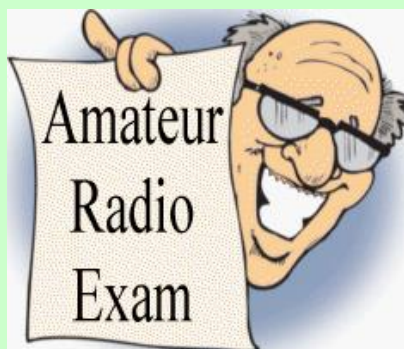
73, *Sid*, N4NQ (Co-CVE)

GARS VE Team Leaders

E-mail: exams@gars.org

GARS VE Website:

<http://gars.org/exams>



Fourth Tuesday

ARRL VEC
7 pm @ United Way Service Center
6279 Fairburn Rd., Douglasville
Contact: Jessie Clower, KB4WFK
(770) 942-6466

Fourth Sunday

2:30 pm Georgia Tech
VanLeer Elec. Building
Rm. W218, 777 Atlantic Dr.
For more information go to
www.w4aql.com and click on "Test Sessions"

Metro Club Meetings

First Tuesday

Kennehoochee ARC
Downtown Marietta
Fire Station #1, Training Room
112 Haynes Street
Marietta, Georgia 30060
Meeting begins at 7:00pm
Talk In 146.880(-)

First Thursday

Atlanta Radio Club
Georgia Red Cross HQ
1955 Monroe Dr., Atlanta
Meeting is at 7:30pm
Talk In -146.820(-)

N.E. Georgia ARC
Commerce Public Library
1344 South Broad Street, Commerce
Meeting is at 6:30pm
Talk In - 147.225(+), PL 123.0

Second Monday

Georgia Tech ARC
Room W218
Van Leer Electrical Engineering Bldg.
Georgia Tech Campus
Meeting at 7:00pm

Second Thursday

Alford Memorial Radio Club
Annistown Road Baptist Church
Annistown Rd & Spain Rd
Stone Mountain
Dinner at 6:00pm, Meeting at 7:30pm
Talk In - 146.760(-)

Second Saturday

North GA QRP Club
Board Room of The Shepherd Center
2020 Peachtree Rd, NW, Atlanta
at 10:00 AM

Third Tuesday

North Fulton Amateur Radio League
Alpharetta Recreation & Parks Dept
Alpharetta Adult Activity Center
13450 Cogburn Road
Alpharetta, GA 30004
meeting at 7:30pm
Talk In - 145.47(-)

For more information, go to:
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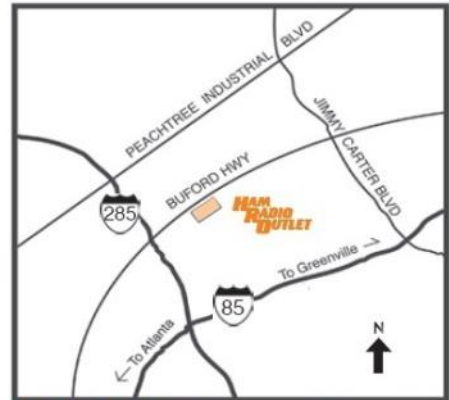
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New England	(800) 444-0047

Manager:
Mark KJ4VO
Assistant Mgr:
James KK4WNN

David AI4XL
Denise
Ken KI4BQS
Ray WN5FB
Koz KD3GC



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